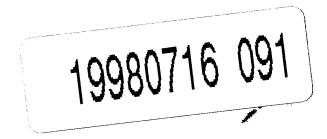
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JPRS 84594 24 October 1983

# Worldwide Report

**EPIDEMIOLOGY** 

No. 336



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DIARRHEA IN CHITTAGONG--September 4:--Diarrhoea claimed 10 lives during last two weeks in the slum areas of Chittagong Municipal Corporation. Municipal health office, however, confirmed six deaths. Meanwhile, Chittagong Medical College and other concerned authorities have taken up anti-epidemic measures. [Text] [Dhaka THE NEW NATION in English 5 Sep 83 p 1]

MORE CHOLERA DEATHS—Saidpur, Sept 7: Diarrhoea claimed another 4 lives of the same family in Saidpur Upazilla. The death toll rose up to 9 within last 20 days. The deceased are Rabiur Rahman (11), Naznin (17), Selim (20), Mokbul (40), Younus (30), Jahiruddin (57), Jobaida (26), Jamirun (70), and Zaheda (22). The victims are of Ward No 6 under Saidpur Poura Area and Botlagari Union. Upazilla Health Office, however, confirmed 6 deaths but disclosed that they died of gastroenteritis. [Text] [Dhaka THE NEW NATION in English 8 Sep 83 p 1]

CHOLERA IN MADARIPUR--Madaripur, Sept 6: Four persons died of cholera in Kandapara and Pinghamanik village under Naria upazilla during last few days. An official source confirmed the news and said that no medical team has so far arrived there in spite of repeated appeals to the Naria health authority. [Text] [Dhaka THE NEW NATION in English 10 Sep 83 p 2]

NILPHAMARI CHOLERA CASES--Nilphamari, Sept 11: Nineteen persons died of cholera in three thanas of Nilphamari subdivision during last fortnight. Many more have been attacked by the disease. Ten persons died at Saidpur, eight in Gomati union of [word illegible] thana and one at Nilphamari. Official confirmation of deaths was, however, lower. [Text] [Dhaka THE NEW NATION in English 12 Sep 83 p 1]

TYPHOID IN NILPHAMARI--Nilphamari, Sept 2: Typhoid and Influenza have broken out throughout Nilphamari subdivision including municipality area. Treatment is badly hampered in the hospital and outsides as well due to nonavailability of necessary medicine. The affected areas are: Domar, Dimla, Jaldhaka, Keshoreganj, Saidpur and Nilphamari. Necessary medicines for the diseases are not available in the hospital or in the markets, it is learnt. [Text] [Dhaka THE NEW NATION in English 5 Sep 83 p 2]

MONONUCLEOSIS OUTBREAK--A BAD OUTBREAK of mono-nucleosis, known in America as the Kissing Disease, has been reported in Belize City, but the Chief Medical Officer, Dr. Antonio Casas, has said there is no cause for alarm. Mono is caused by a virus and the symptoms resemble those of influenza The infection is vicious and painful however, and complications could effect the liver and the spleen. "Care should be exercised," Dr., Casa has told the REPORTER, "that complications do not arise which could affect the liver or the heart." [Excerpt] [Belize City THE REPORTER in English 18 Sep 83 pp 1, 16]

MINAS CERAIS DISEASE INCIDENCE—Minas Gerais, with approximately 14 million inhabitants, has 1,400,000 with some type of mental disorder; 800,000 with Chagas disease; 900,000 with schistosomiasis; 130,000 with tuberculosis; 80,000 with leprosy; and out of every 1,000 children born, 100 die before they are a year old. This summary was released by the secretary of health, Dr Dario de Faria Tavares, in a booklet which began distribution yesterday and which concerns the first months of Tancredo Neves' administration.

[Text] [Rio de Janeiro JORNAL DO BRASIL in Portuguese 8 Sep 83 p 5] 12353

AIDS DEATHS SUSPECTED—The Epidemiological Control Service of the State Office of Health is investigating what may be the ninth fatal case of AIDS (Acquired Immune Deficiency Syndrome) in the capital. Reginaldo de Mello, 24, died in the Sao Paulo Hospital with some symptoms characteristic of the disease, and was buried yesterday in the Vila Alpina Cemetery. The management of the hospital's epidemiology department refuses to confirm suspicions that Reginaldo had contracted the disease; however, it is performing pathology tests on the patient's viscera, and the results will only be available next week. Officially, the cause of death in this case was pneumonia, the disease which has killed the majority of AIDS patients until now. According to Paulo Roberto Teixeira, of the Epidemiological Control Service, 8 AIDS deaths have been confirmed in Sao Paulo. In all of these cases, the victims were homosexuals, and all except one had recently traveled outside Brazil. [Excerpt] [Sao Paulo O ESTADO DE SAO PAULO in Portuguese 15 Sep 83 p 11] 12353

NATIONWIDE POLIO INCIDENCE--Brazil has had 13 cases of polio registered so far this year, according to technicians in the Ministry of Health. Of this number, 10 are in the Northeast, 2 in the North, and 1 in the South. Two cases were fatal. The Ministry of Health also lists 116 suspected cases of polio and is awaiting confirmation. Until now, 175 cases have been contacted, with 13 being confirmed and 46 being given a clean bill of health. Of the pending cases, the majority is located in the states of Para and Pernambuco. The 116 pending cases are distributed by region as follows: 22 in the North, with 18 in Para; 39 in the Northeast, with 19 in Pernambuco; 32 in the Southeast--with the largest concentration in Espirito Santo, where 10 cases have been registered, and 10 in the South, with 5 in Parana; and 13 in the Center-West, with 6 cases registered in Mato Grosso. The recent vaccination campaign on August 13 reached 97.6 percent of the proposed goal, according to the latest bulletin released by the Ministry of Health, which is not yet the final word. Out of a total of 18,829,582 children from birth to 4 years of age, 18,374,546 were vaccinated. [Text] [Sao Paulo O ESTADO DE SAO PAULO in Portuguese 20 Sep 83 p 10] 12353

CHAGAS DISEASE CONTROL EFFORT—For the first time the Health Ministry will be able to control the entire Chagas disease endemic area of 2 million square meters. The 10 billion cruzeiros that FINSOCIAL [Financial—Social Fund] transferred to SUCAM [Superintendency for Public Health Campaigns] will allow SUCAM to spray, up to late 1984, all the houses located within the 2,072 municipalities where the carrier insect breeds. There are over 5 million people suffering from Chagas disease in Brazil and, according to a survey performed by the Health Ministry, most of them are clustered in the states of Minas Gerai, Rio Grande do Sul, Goias, Bahia, and Sergipe. [Excerpts] [PY092316 Rio de Janeiro JORNAL DO BRASIL in Portuguese 18 Sep 83 p 21]

MINERS CARRY MALARIA, HEPATITIS--Nearly 7,000 gold miners from Itaituba, southern Para State, are malaria carriers, and they will be a potential threat when they return from Serra Pelada starting 15 November. This warning came from SUCAM's [Superintendency for Public Health Campaigns] regional director in Para State, Dr Paulo Edson Furtado Pereira de Souza. "Nowadays the situation is so alarming that even international organizations are concerned over the incidence of malaria and hepatitis in Itaituba," said Pereira de Souza. Pereira de Souza added that there are almost 35,000 gold miners in the Itaituba forests, 20 percent of them malaria carriers. [Excerpts] [PY092316 Rio de Janeiro JORNAL DO BRASIL in Portuguese 19 Sep 83 p 4]

MYSTERY DISEASE DEATHS—Simla, Sept 12 (UNI)—Six people died of an infectious disease in Tanganu village in Rohru subdivision of Simla district on Saturday, delayed reports received here today said. Giving this information, Simla district deputy commissioner Mohindra Lal said, these people developed chest pain and vomitted blood. These symptoms were accompanied by fever. Doctors from Simla had been sent to the village, he said. Details were awaited, Mr Lal added. [Text] [New Delhi PATRIOT in English 13 Sep 83 p 4]

SIMLA PLAGUE OUTBREAK--Simla, 30 Sep (UNI)--Plague was reported to have made its reappearance in the country after 16 years with its outbreak in five villages of Himachal Pradesh this month. The dreaded disease, which claimed 60.3 lakh lives, representing 47 per cent of the total deaths in the country at the turn of this century, was virtually eradicated and no case had been reported since 1967. While the findings of the National Institute of Communicable Diseases (NICD), which conducted investigations in the area, were awaited some of the doctors who visited the plague spots, confirmed in private that initial tests had diagnosed the disease as plague, and that they were treating patients on "the line of plague." The NICD team, which returned to Delhi after collecting various samples for analysis, was silent as to whether the disease was caused by rat flea or rabblies. So far, the disease has killed 18 people, including six women and three children in five villages of Tangnu, "Deodi, Gumma, Jabbal and Khabbal in Rohru Tehsil of Simla District." [Excerpt] [Delhi PATRIOT in English 1 Oct 83 p 1 BK]

#### TOURISTS BRING MALARIA FROM INDONESIA

## Penang THE STAR in English 6 Sep 83 p 10

[Text]

PENANG, Mon. — An Australian tourist has died of malaria and many more tourists are believed to be bringing the disease from Indonesia. And medical sources here said the disease may spread to the local population.

Mr. Joseph O'Sullivan, 29.

ease may spread to the local population.

Mr Joseph O'Sullivan, 29, died of falciparum malaria (blackwater fever) at the Penang Adventist Hospital on Wednesday after having stayed at Nias Island, Sumatra, for three weeks.

His travelling companion, Michael Thomson, who also contracted the disease, said he believed the disease came from Indonesia.

Mr Thomson said he was lucky to be alive because he sought early treatment.

He was treated twice at a private clinic in Chulia Street.

Mr Thomson, a New Zealander, said he knew of three other malaria victims including, an American who visited Penang after having stayed in Nias Island recently.

"I met the American in Penang a few days ago. He

"I met the American in Penang a few days ago. He told me he had malaria and

was given treatment by a ship doctor in Nias Island last month."

Mr Thomson said he and Mr Sullivan left Australia for Indonesia on a holiday on July 17.

The duo first flew to Bali where they stayed for a day and went to Java and Sumatra. They then took a boat from Sibolga to Nias Island.
They stayed at a lodging house in Nias Island and spent part of their time wind surfing.

Mr Thomson said there were many mosquitoes on the island, especially in pools of stagnant water. "Before we arrived, we took anti-malaria tablets. We also used mosquito nets when we slept."

The two left Nias Island on Aug. 9 and went to Lake Toba where they stayed for four days before flying to Penang on Aug. 12.

They booked into a hotel in Chulia Street. Mr Thomson said he and Mr Sullivan had fever the next day."

He went to see a doctor Mr Thomson said there

He went to see a doctor the same day. But Mr Sulli-van remained in bed. The doctor gave him an injection and some medicines. His condition then improved.

Mr Thomson said Mr Sullivan only went to see a doctor on Aug. 15. His condition did not improve and on Aug. 17, went to the Advent-ist Hospital where he was admitted.

State Medical and Health Services Director Dr C. Fonseka said his depart-ment would investigate the

Dr Fonseka said: "We have had imported cases of malaria in the past, but have been able to prevent the disease from spreading to the local people."

#### GERMAN MEASLES HIT UNIVERSITY

Kuala Lumpur NEW STRAITS TIMES in English 9 Sep 83 p 1

[Article by John Pillai]

[Excerpt]

KUALA LUMPUR, Thurs. — There is an outbreak of German measles (rubella) at the University of Malaya — 70 of its students were down with this highly contagious disease up to the end of last month.

Since the disease posed grave danger to women in their early pregnancies, all married women, "whether pregnant or otherwise," have been advised to go for certain tests.

The university council, which held its regular meeting today, was briefed on the latest situation. Among those present was the director-general of Medical and Health Services.

The university has set up quarantine wards in the colleges to deal with new cases. It has sent on two weeks' leave all those who were detected initially as suffering from rubella as one measure to curb the spread of the disease.

The authorities have also embarked on a programme to screen all staff and students for rubella, using blood tests. Due to the number and the amount of work involved, it will take some time for

the results to be known. The university's Deputy Vice-Chancellor (student affairs) Associate Professor Mohammad Yunus Mohammad Noor stressed that due to prompt action by the authorities, the "situation is under control."

"We have been assured by the medical authorities that there is no cause for alarm," he said.

The university came to know of the outbreak of the disease in mid-August when its Student Health Service alerted the authorities that 16 cases of German measles were detected among the students.

Prof. Yunus said: "We immediately contacted our Medical Faculty's Department of Social and Preventive Medicine (DSPM)

Our own doctors from the Student Health Service and those

from the DSPM carried out immediate investigations."

From the investigation, it was confirmed that 55 students were suffering from German measles in the university as of Aug. 25 males and 21 females.

males and 21 females.

"By the end of August, our investigation showed a total of 70 students including one lady member of the staff had contacted the disease."

Although the 70 victims formed a small proportion of the university's 9,300 student population, the university was going all out to ensure everyone was made aware of the contagious nature of the everyone was made aware on the contagious nature of the disease and the steps to be taken to check it, he added. All hostelites, who had the disease, were confined to the

quarantine wards while non-hostelites were told to stay at home till they had recovered.

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# CHOLERA OUTBREAK IN FOURTH MONTH

Kuala Lumpur NEW STRAITS TIMES in English 14 Sep 83 p 6

[Text]

KUANTAN, Tues. — A six-year-old child is the latest victim of cholera in latest victim of cholera in Temerloh district, the State Deputy Director of Medical and Health Ser-vices, Dr P.J. Jacob, said. The pupil, from Tan-jung Kerayong was warded at the Mentakab district hospital yester-day.

day.

There are two cases and 45 carriers receiving treatment at the Mentakab district hospital while all the carriers at

the Kuantan General hos-pital have been dis-charged.

Meanwhile, health teams are working hard to eradicate the disease. Dr Jacob advised resi-

dents along the Pahang River to boil the water before drinking because it had been found to be contaminated with cholera germs.
To date, 129 cases and

424 carriers have been reported since the outbreak began four months ago.

CHOLERA OUTBREAK IN MAPUTO, PRISON--In a number of wards of Maputo City, particualrly at Machava prison, cases of cholera were once again observed 4 months after the disappearance of the epidemic which hit the south of the country in the first half of this year. According to NOTICIAS, which cites health administration sources, the investigation of the first patients has shown that there are close links with patients in Gaza Province. The same source added that although the situation is delicate it is not yet grave. The source pointed out that actions to fight the outbreak had already been mounted in a number of wards through mobile brigades. [Text] [MB111154 Maputo Domestic Service in Portuguese 0800 GMT 11 Oct 83]

# MENINGITIS SPREADS AT WHANGAPARAOA

# Auckland THE NEW ZEALAND HERALD in English 2 Sep 83 p 3

[Text]

At least three more people are being treated for meningitis as a result of Health Department tests at Whangaparaoa.

The Auckland Medical Officer of Health, Dr John Stephenson, said yesterday that throat swabs had been taken from relatives, friends and colleagues of people affected.

Four cases were reported on the peninsula last month.

On Sunday, a 52-year-old Whangaparaoa man died from the disease.

The man had no known connections with the first group of four who had contracted the disease and who had new been successfully treated.

Health Department testing in the area was expected to be completed this weekend. So far tests on three or four people had proved positive, Dr Stephenson said.

An outbreak of meningitis was unusual because of the availability of antibiotics to prevent its spread, he said.

Although it was spread through droplets from a throat infection and could be passed on by someone coughing, people had to be in close contact.

Dr Stephenson said meningitis was an inflammation of the membranes surrounding the brain and spinal cord. The disease was sometimes difficult to diagnose because its symptoms could be vomiting or flu-like.

#### WHOOPING COUGH STILL MAJOR HEALTH PROBLEM

Wellington THE EVENING POST in English 19 Sep 83 p 11

[Text]

DUNEDIN, Today (PA).

— The effectiveness of the vaccine against whooping cough and the current immunisation programme needs to be reviewed according to an article in the "New Zealand Medical Journal."

The article was contributed by an Otago post-graduate medical fellow, Dr D Bourchier, associate Professor G D Abbott of the department of paediatrics at the Christchurch Clinical School of Medicine, and Mr K U Fieldes, a laboratory technologist.

Whooping cough continues to be a major health problem in New Zealand.

In 12 months, 64 patients suffering from whooping

cough were admitted to Christchurch Hospital's paediatric wards.

Of these, 24 or 37 percent were fully immunised. The vaccine used has had a controversial history since its introduction in the United States in the 1940s and in Britain in 1957.

Initial success and efficency became less convincing with increasing numbers of immunised children contracting the disease in the 1960s.

Serotyping showed the vaccine did not provide protection against the predominate serotype, and when this was rectified, its efficiency improved.

Whooping cough continues to be an important clinical problem, despite immunisation, according to the article.

#### HEPATITIS OUTBREAK IN CHRISTCHURCH

# Christchurch THE PRESS in English 20 Sep 83 p 9

[Text]

Another six cases of hepatitis were reported last week to the Health Department in Christchurch.

Departmental officers had warned that Christ-church might face an outbreak of the infectious disease a week earlier, when eight cases were reported.

The Deputy Medical Officer of Health, Dr M. A. Brieseman, yesterday repeated his warning that doctors and the public should know hepatitis was still about.

Cases reported last week were almost all young people. Three had infectious hepatitis which could be spread by personal contact or through food handling. Two were unknown and the last was serum hepatitis

spread by blood traces on needles, sexual contact, and sometimes saliva.

"Most of them are sporadic," Dr Brieseman said.
"But we can trace personto-person contact in some cases."

The two factors needed for an outbreak were enough non-immune people in the community and conditions for the spread of hepatitis, which caused inflammation of the liver.

"The major factor in producing an outbreak is people's behaviour in the early stages," Dr Brieseman said.

Anyone who had a flu-like illness with some abdominal discomfort should be aware they might have hepatitis and avoid handling food or other contact which could spread the infection.

NEW ZEALAND

## BRIEFS

SCARLET FEVER OUTBREAK—Wanganui, Today (PA)—Wanganui and the Waimarino have been hit by highly infectious scarlet fever, a disease virtually unheard of in New Zealand for the past 30 years. Today Wanganui's medical officer of health, Dr Kenneth Thomson, said a child believed to be suffering from the disease had been admitted to Wanganui Base Hospital. He knew of at least 15 other cases, five of them in the Waimarino. Many of today's doctors had never seen or dealt with scarlet fever and it could be difficult to diagnose. [Text] [Wellington THE EVENING POST in English 6 Sep 83 p 28]

## FIRST DEATH OF AIDS VICTIM REPORTED

Oslo AFTENPOSTEN in Norwegian 12 Sep 83 p 4

[Text] Norwegians in general have very little cause to worry about AIDS, emphasizes Medical Director Johan Bruun of Ulleval Hospital, commenting on Norway's first case of an AIDS-related death. Homosexual men in stable paired relationships have little reason to worry about the disease. All of the AIDS cases in Norway are the result of infection brought in from abroad, chiefly from the U.S.

The danger that the disease called AIDS will become widespread among the general population is very small. Seen in the light of that fact, the attention which is currently being paid to the disease is a little out of proportion, according to medical director Bruun. It was in Bruun's ward in Ulleval Hospital that a 35-year old man from Vestfold died of AIDS Friday morning. The man was admitted to the hospital on 21 August. It was the fourth AIDS case here in Norway, but the first to result in death.

Why some patients are affected so seriously by AIDS, while others have an easier time of it, is something doctors have no answer for as yet. What is known is that AIDS attacks the body's immunity system, thereby breaking down the patient's resistance toward other diseases. The patient can then die from diseases which are usually not thought to be at all dangerous.

Doctors the world over are working on finding out what causes AIDS. In Norway there is so little data to draw from that the scope of the research we can do here is minimal.

"Meanwhile, we monitor each case very carefully, and we examine the infection defense systems of each patient," explained Bruun. As far as Bruun is aware, there are four AIDS cases currently registered in Norway. The disease occurs first and foremost among homosexual men and users of injected narcotics. The disease is transmitted only by intimate contact (blood contact). The homosexual community is on the watch for better information concerning the precautions which should be taken in relationships between persons who fall under the high-risk categories. "If we can confirm that all of the infected Norwegian patients 'caught' the disease abroad, then one of the precautions definitely ought to be to abstain from casual sexual encounters while traveling abroad," Bruun pointed out.

"Limiting yourself to one partner would also decrease the danger of infection considerably. Using a condom while having sexual relations, also, would be a further defense against infection," he said.

The 1948 Alliance, which has noticed increased hostility towards its members as a result of AIDS, attributes the hostility to ignorance about the disease. The authorities, therefore, ought to appropriate funds to make decent information available on AIDS, says the Alliance, which is currently working on its own brochure about the disease.

9584

HAVANA NOTES HEALTH PROBLEMS--Peru faces a serious crisis in the health sector, according to Medical School Dean [name indistinct], who made this assertion in a report published by EL DIARIO MARKA. According to the document, for every 1,000 children born, at least 100 die before they reach 1 year of age. The report adds that 20,000 people suffered from tuberculosis last year. [Text] [PA111947 Havana International Service in Quechua 2200 GMT 7 Oct 83]

## TYPHOID FEVER OUTBREAKS INCREASE IN PORTUGAL

Lisbon DIARIO DE NOTICIAS in Portuguese 6 Sep 83 p 7

[Article by Antonia de Sousa: "Outbreaks of Typhoid Fever Show Increase in Portugal"]

[Excerpts] It must be admitted that a recrudescence of typhoid fever cases is about to take place in our country. It must be pointed out that an important piece of evidence to this effect is the fact that during the first 6 months of this year the National Institute of Health (INSA) was informed of 132 cases of "Salmonella typhi," whereas, during the entire year of 1982, there was knowledge of only 133 strains. Now, 55 cases were recorded in Barreiro, the majority of which occurred during the course of last May.

What is happening? Is there indeed a recrudescence of typhoid fever in our country? This is the question which we addressed to Dr Maria Vitoria Vaz Pato, executive in charge of the National Center for Intestinal Lysotypology of the Ricardo Jorge Institute. "There is that possibility," said the bacteriologist, citing the above statistics. However, in her opinion, the total number of cases must be substantially higher. And she explains why.

Typhoid fever is one of the cases which must be reported according to the law, but, with us, laws are often not obeyed. There is no way of knowing whether the clinics make such reports and, one thing is certain, the reports always list fewer cases than there actually are.

About 130 Cases in Six Months

The greater number of untracked cases of typhoid fever is in the Lisbon area, particularly "because here the patients go to the infectious/contagious disease services" and because more reports come to the INSA from the capital. Of the 132 cases that occurred during the first six months of this year as indicated above, 55 come from Barreiro. From the same focus of infection?

Vitoria Vaz Pato states that the outbreak of typhoid fever in Barreiro had its origin in several strains.

"The Barreiro zone is closely linked with Lisbon and this city has practically all the phage types found in Portugal: more than 12 types of a total of 96 known in the entire world."

Resistance to Chloramphenicol

According to what Maria Vaz Pato told us, the great problem presented by typhoid fever is that the treatment of choice is chloramphenical and strains have appeared that are resistant to that antibiotic. With respect to Portugal, in 1977 a strain resistant only to a slight degree appeared in Santarem, but this outbreak seems to have been eliminated because the carriers were located and treated.

At the end of 1979, a strain was detected in a patient hospitalized in Porto that was extremely resistant to chloramphenicol and to other antibiotics (ampicillin, streptomycin, kanamycin, sulfonamides and cotrimoxazol [sic]). In the opinion of the bacteriologist, "this case was treated in exemplary fashion from the point of view of public health." The hospital was contacted immediately and it was possible to locate the carrier, who was the wife of the patient and who had suffered from typhoid fever some years before, and the patient did not leave the hospital until the bacillus had been eliminated. "The wife is still a carrier, but she undergoes periodic examinations for purposes of control." And the bacteriologist observes: "Unfortunately this case of typhoid fever control is almost unique."

But why? After all, why is such control not put into practice?

The answer of the bacteriologist amounts to an evaluation of the situation: "What is serious in Portugal is the fact that epidemiological investigation is not conducted on a routine basis. We do not have a national file of carriers. About 3 percent of typhoid patients continue to be carriers. And so it is easy to estimate how many carriers there are! In the last 10 years, the number of cases reported is approximately 600!"

And Maria Vitoria Pato adds: "But if it is not reasonable to think that a process of control of typhoid fever can be implemented throughout the country, it is nonetheless necessary to do so in the areas most affected and where there are better Health Services."

Because, according to what Maria Vitoria Pato points out, conditions are created which lead to significant outbreaks of typhoid fever.

When we consider the sanitary situation of the country, in which 4,000,000 inhabitants do not have a water supply in their homes and 5,000,000 do not have drainage systems for sewage, the deficiency of Health Services, the occurrence of resistant salmonella typhi and the excessive use of antibiotics to so great an extent in human and veterinary clinics, animal rations etc., it can be concluded that conditions are created which lead to the occurrence of significant outbreaks of typhoid fever caused by resistant strains.

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#### RECOMMENDATIONS OF CONFERENCE ON PARASITOLOGY

Bucharest VIATA MEDICALA in Romanian Feb 83 p 95

[Article by Al Voiculescu: "Recommendations of the Conference on Parasitological Problems Held in Slatina on 23 October 1981"]

[Text] The conference, "Problems of Diagnosis, Epidemiology and Combatting Protozoic and Ectoparasitic Infection in Man" was held in Slatina on 23 October 1981. The Olt county health directorate, the antiepidemic health central and the Olt county branch of the USSM [Union of Societies of Medical Sciences] organized the meeting which brought together teachers, scientific researchers, epidemiologists, laboratory physicians and other specialists.

In addition to the detailed findings on the above-mentioned themes, the following general recommendations emerged from the very beginning of the conference:

--To introduce and diversify medical parasitological concerns (clinical, diagnostical, epidemiological and prophylaxical) throughout as many counties as possible inasmuch as the concerns brought up in Olt county are applicable to any other of our country's counties.

--Adequate training of future physicians in parasitology can be achieved only if 20 additional credit hours of instruction (10 hours classroom and 10 hours practical applications) are given in university training.

--To improve laboratory diagnosis of parasitic infections, the training of biologists who must specialize in this area is recommended.

The following recommendations emerged from the discussions held and the numerous parasitological issues raised:

Eleven participants spoke on the first subtopic (Giardiosis) of the first topic (Protozoa) and the following recommendations were made:

In our country:

1. Giardiosis is a health problem and,

- 2. A more critical evaluation of the symptomatology exhibited by the sick is necessary to define the clinical picture of giardiosis.
- 3. Antiparasitic treatment for giardiosis will be administered only to people whose diagnosis is confirmed by laboratory analysis.
- 4. Necessary protective measures are required given the ease with which giardiosis is spread.
- 5. Given the frequency of giardiosis in pre-school child centers, it is recommended that a coproparasitological examination also be required at these centers.
- 6. It is recommended that the scientific name for giardiosis be Giardia lambia.

Ten persons spoke on the second subtopic (Urogenital Trichomoniasis) of the first topic (Protozoa) and they reached the following conclusions:

- 1. Broadening research on:
- -- the importance of the Trichomonas vaginalis infection in males and females in genitourinary pathology;
- -- the value of treating trichomoniasis with Metronidazol compared with Tinidazol;
- 2. Extending the diagnosis of pneumocystosis by including the identifications of trophozoic forms in the company of lymphoplasmotic infiltrations from larynxotracheal secretions.
- 3. Discovering the multiple aspects of indigenous amebiasis.
- 4. The need to expand laboratory diagnosis of toxoplasmosis.
- 5. The need to research the pathogenic role of the species Blastocystis hominus and Dientamoeba fragilis.
- 6. It is proposed to include some parasites in diarrheal illness etiology and in the etiology of nosocomialic infections (Pneumocystis carinii, Giardia lambia and Trichomonas intestinalis) for the last category.
- 7. Discussions are proposed in the use of the terms infection/infestation in parasitology.

Four participants spoke on the second topic (Ectoparasitology and Insecticides) and made the following recommendations:

- 1. Reconsideration of the possibility of now using Lindan (HCH) perhaps in a .5 percent solution in medical alcohol, for local applications on the skin.
- 2. Consideration of certain aspects to improve dissemination of household insecticides to the general population, including the Polfosclor type of emulsifiable products.

- 3. Orienting helath-related insect control toward efficiency, economy, toxicity and accessibility for the goal in question (for hygenic reasons).
- 4. Appraising the quality of applied insecticides primarily on eliminating the risk of epidemics and only as a secondary criteria, on the results of biological testing (including survivability).
- 5. As a part of the actions taken to reduce or eliminate the discomfort caused by mosquitoes in urban areas, priority must be given to efforts to discover their sources and destroy their larvae through measures suitable to the local conditions regardless of the difficulties in gaining access to the flooded subsoils populated by mosquitoes.
- 6. Concern for the objective and comprehensive publication in our country's specialized literature of the toxicity level (in the view of the majority of today's researchers) for all authorized insecticides used for health-human insect extermination.

In addition to these proposals, the following requirements were pointed out in the discussions:

- --To make better use of some of the presented findings by publishing them in the specialized literature;
- -- To prepare a paper concerning the pathogenic role and the possibilities for complex laboratory diagnosis of parasitic illnesses.

At the close of the proceedings, it was felt that because of the scale of the works presented and the diversity of matters discussed, the work of this scientific gathering went beyond county level considerations and is appropriate for proceedings organized at the national level.

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THAILAND

# SEVERE OUTBREAK OF JAPANESE ENCEPHALITIS REPORTED

Chiang Mai Students

Bangkok MATICHON in Thai 21 Jul 83 p 3

[Article: "Twenty-One Students In Chiang Mai Die From Encephalitis"]

[Text] There have been outbreaks of encephalitis in several areas in Chiang Mai. Twenty-one children have died. Doctors have said that the disease is very serious and that if a person does not die, he may become handicapped. People have been advised to be careful of mosquitos in the evening and early morning.

A report from Chiang Mai Province stated that during the rainy season, there was an outbreak of encephalitis in some localities in Chiang Mai Province. Twenty-one of the 87 people who came down with the disease have died. Most of the ill people are from Fang and Mae Ai districts and are students below the age of 15.

Encephalitis is a very acute disease. More than 30 percent of the people who contract this disease die. This rate is second only to that for rabies. Those who live may be handicapped. For example, they may become deaf or blind or suffer mental retardation.

Dr Mongkhon Na Songkhla, the director of the technical section at the Chiang Mai Provincial Public Health Office, and Dr Thien Chieuwanit, the head of the Pediatrics Section at the Chiang Mai Municipal Hospital, said that this disease is caused by a virus that is spread by mosquitos. This type of mosquito lays its eggs in rice fields and fetid water. It feeds in the evening and early morning.

The symptoms of this disease include loss of appetite, nausea and a sore throat resembling that in the first stage of a cold but without any nasal discharge. Then, 2-3 days later, the symptoms include cerebral dysfunction, high fever of rapid onset, headache, slurred speech and stiffness of the neck and back. In very severe cases, there may be spasms and loss of feeling. At present, there are no drugs that can be used to treat this disease. Thus, the best protection from this disease is to keep

from being bitten by mosquitos. This can be done by sleeping under a mosquito net and not going outside in the evening.

Spreads Throughout North

Bangkok MATICHON in Thai 31 Jul 83 pp 1, 16

[Article: "Encephalitis Spreads Throughout the North; About 500 People Have Been Found to Have the Disease. It Has Killed 13 People In Just 7 Days"]

[Text] Encephalitis is spreading throughout the north. It is being spread by mosquitos and pigs. Chiang Mai, Lampang, Uttaradit and Kamphaengphet have all been hit. Since the beginning of the year, almost 500 people have been found to have this disease. In Chiang Mai, more than 20 have died. Most recently, in Kamphaengphet, 13 people died in just 1 week.

A reporter in Kamphaengphet reported that on 30 July, Dr Thanom Laorakphong, the director of the Kamphaengphet Hospital, revealed that at present, there is a severe outbreak of encephalitis in Kamphaengphet Province. During the past 7 days, 38 people, including 30 children and 8 adults, have come for treatment. Of these, 13 have died. Three of these were adults: Mrs Thongbai Khlaikaeo, age 22, who lives in Songtham Commune, Muang District; Miss Somphan Samphao, age 15, who lives in Bang Ta Wai Commune, Khlong Khalung district; and Mr Lek Pinphet, age 21, who lives at 35 Village 2, Nong Luang Commune, Lan Kra Bu Subdistrict.

The reporter also reported that besides these, 10 children ages 1-10 also died. Some of the patients whose condition has improved have asked to go home. But some must continue to be treated at the hospital. At present, there are five people who are still seriously ill. The most seriously ill is Somphot Phinit, age 2, who lives at 114 Village 8 in Nong Thong Commune, Sai Ngan District.

In an interview, Dr Kramon Serayanon, the chief physician at the Kamphaengphet provincial health clinic, said that encephalitis is caused by contact with some microorganism such as a virus, bacteria, fungus or parasite.

Mosquitos carry this disease from pigs and infect humans. The incubation period is about 7-10 days. People cannot transmit this to other people.

Even if a mosquito bites a person who has this disease, it cannot transmit the disease to another person. The symptoms of this disease are loss of appetite and nausea followed by malaise for 2-3 days. This is followed by cerebral dysfunction, the rapid onset of a high fever, and meningitis. Other symptoms include headache, vomiting, and slurred speech. There may be paralysis, spasms and loss of feeling.

On 23 July, MATICHON printed an article on encephalitis based on a statement by Dr Natda Siphai, the director-general of the Communicable Disease ontrol Department. He said that at present, there is a serious outbreak of encephalitis in the north. There have been 438 cases, with many found in Chiang Mai, Lampang, Uttaradit and Kamphaengphet provinces. This is a very distrubing matter. An expensive vaccine has to be used. In Chiang Mai Province, 87 people have come down with the disease and 21 have died.

The mortality rate from this disease reaches 30 percent. And some of those who live will be handicapped. In 1982, there were 1,500-2,000 cases of encephalitis and 20-25 percent of these people died. That is, almost 500 people died.

Pattern of Epidemics Reported

Bangkok MATICHON in Thai 5 Aug 83 p 3

[Article: "Encephalitis: If the Person Lives, He May Suffer Mental Retardation"]

[Text] Summary of reports on Encephalitis:

In 1983, from the beginning of the year through July, there have been 663 cases and 104 have died.

Provinces with severe outbreaks in the first 10 provinces:

Central Region: Nakhon Phathom, Bangkok, Chanthaburi.

Northern Region: Chiang Rai, Uttaradit, Phitsanulok, Kamphaengphet, Phetchabun.

Northeastern Region: Nakhon Ratchasima, Ubon Ratchathani, Buriram.

Southern Region: Phatthalung, Nakhon Sithammarat, Surat Thani.

A public health problem that is endangering the health of the people and that is causing much alarm among doctors is the severe outbreak of Japanese encephalitis in various provinces, particularly in the north.

Encephalitis is a serious disease, and it poses a great danger to children. This disease is found throughout Asia from eastern Siberia, China, Korea, Taiwan, Japan, Okinawa, Guam, Indonesia, Thailand and Singapore to India. Encephalitis is caused by a Group B Arbovirus or Flavivirus as it is called. It is spread by the Culex mosquito.

As for Thailand, Malaysia and southern India, where the temperature is hot year-round, epidemics are endemic, that is, people may contract this disease at any time during the year. But from May to August, which is the rainy season, the number of mosquito carriers increases and so the number of cases of encephalitis may increase greatly.

#### Symptoms of the disease:

Some people who contract encephalitis have only a fever, headache and stiff neck. This is like meningitis. Those with severe cases have a very high fever, severe headache and malaise. They may have seizures, nausea and vomiting. They may have trouble speaking and may experience blurred vision. They may feel very drowsy for 24-48 hours and have army and leg spasms or convulsions.

Some people experience paralysis of the limbs on one side. They lose feeling, go into a coma and die within 10 days.

As for people whose symptoms are not severe, they will be sick for 4-10 days and then start to recover. Their fever will subside. The recovery period is rather long. Patients will feel weak and they will have spasms and have nerve palsies. The actions of the muscles and other organs will not be coordinated. After recovery, the person may be left with some mental handicap such as mental retardation or poor memory. He may have spasms like a stroke or be left paralyzed. In less severe cases of encephalitis, the person will recover completely. The chances of recovering completely are only 30 percent.

#### Epidemiology:

Many cases of encephalitis have been discovered in the north and northeast of Thailand. It is more common in these regions than in other regions. It is prevalent in rural areas, with cases of encephalitis found in various villages. The mortality rate is 20-25 percent. Most of the victims are children below the age of 15, with the greatest number between 5 and 9 years of age. But adults may contract encephalitis, too.

#### Transmission of the disease:

The encephalitis virus is trasmitted to several types of animals including cattle, water buffalo, dogs, pigs, some species of birds, ducks and chickens. These animals do not show any symptoms of the disease. An important source for the spread of the disease to humans is pigs since, in pigs, the virus remains in the blood stream for a longer period of time than it does in other animals. When mosquitos bite pigs that are infected with this disease, they become infected. In the mosquito, the virus multiplies for the first time in the intestional lining and in the fat cells. Finally, they join together in the salivary glands. When an infected mosquito bites a person, the virus is transmitted to the person. In humans, the virus lives in the blood for a short period and then multiplies in the brain.

In humans, most people who contract the virus do not show any symptoms. Concerning the spread of this disease, the ratio of people who become ill to people who become infected but who do not show any symptoms is 1 to 300. This may be because people have developed an immunity after

having contracted other Group B viruses such as dengue. This affords some protection against the disease but not complete protection.

## Carrier mosquitos:

Mosquitos that can serve as carriers include mosquitos of the Culex family, such as Culex tritaeniorynchus, Culex gelidus and Culex fuscocephala. These are small, brown mosquitos that prefer to live outdoors. They feed during the night. The female lays her eggs on the surface of the water in ponds, marshes, rice fields, water reservoirs near the rice fields and streams.

When the eggs are 1 to 2 days old, the young mosquitos, or larvae, emerge. Then, in about 7 to 10 days, the larvae molt and become middle-age larvae, or "mong" as they are called. After 2 more days, the "mong" molt again and turn into full-grown mosquitos that go looking for food. Thus, the cycle from egg to mature mosquito lasts about 14 days. These mature mosquitos like to drink blood from livestock such as cattle, water buffalos and pigs more than from humans.

#### Disease prevention and control:

It is rather difficult to prevent and control encephalitis. A method that has been used in Japan and Taiwan with some success is to innoculate new-born pigs against this disease in order to keep the pigs from contracting this disease and spreading it to humans. As for vaccines given to humans to provide protection from encephalitis, a vaccine is produced in Japan and Taiwan but its effectiveness has not yet been studied very well. Also, it is expensive. Two injections must be given to provide protection against the disease, and a booster shot must be given every 1 or 2 years since the immunity provided does not last very long.

Another way to prevent this disease is to eradicate the carrier mosquitos and to keep from being bitten by mosquitos by not going near or looking after the livestock in the early evening. People should try to keep fires burning around their houses and livestock pens in order to keep mosquitos away from their houses. They should move the livestock pens out from under and away from their houses.

#### Encephalitis Is Spreading In the Central Region

The Ministry of Public Health has ordered the communicable diseases control centers throughout the country to control and eradicate mosquitos in order to prevent an encephalitis epidemic. There are already serious outbreaks in the north and the disease is starting to spread to the Central Region. Doctors have warned people not to play with mosquitos or animals bitten by mosquitos.

Mr Thoetphong Chainan, the deputy minister of public health, talked about the encephalitis situation. He said that encephalitis is caused by a flavivirus and is spread by mosquitos that breed in the ponds in the rice fields. At present, statistics show that from the beginning of the year to July, more than 500 people have contracted encephalitis. This is a slight reduction from the previous year. Most of the provinces which have cases of encephalitis are in the north. Provinces in the northeast, such as Nakhon Ratchasima and Ubon Ratchathani, have a lower rate of incidence. [Most of the] people with this disease are between the ages of 3 and 20. The rate of incidence declines after August. At present, the Ministry of Public Health has ordered the regional communicable disease control centers to take action to control and eradicate the mosquitos, which are the carriers of this disease.

As for the symptoms displayed by people with this disease, Dr Natda Siyaphai, the director-general of the Communicable Disease Control Department, said that the symptoms of this disease are fever, headache, nausea, vomiting trouble speaking, blurred vision and spasms of the hands and feet. And people may die within 10 days. As for people with less severe symptoms, they will be sick for about 4 to 10 days and then begin to recover. But after recovering, there may be some cerebral dysfunction left.

If the symptoms are not too severe, the person will recover completely. The mortality rate is about 20 percent. There is still no drug that can be used to treat this disease directly. Thus, people should take precautions to prevent being bitten by mosquitos. They should move the animal pens away from their houses and keep fires burning around the pens to keep mosquitos away from the animals. This disease cannot be prevented by using the vaccine since the vaccine has not yet been approved by the World Health Organization and it is very expensive. If it is given to people, it will cost 400,000 to 500,000 baht per village to innoculate the villagers.

In Nakhon Sawan Province, a MATICHON reporter reported that at present, a large number of people, particularly youths, have contracted encephalitis and have gone to the Sawan Pracharak Hospital for treatment. Dr Prasong Kiettibamphen and Dr Siriwan Palakawong Na Ayuthaya, who are treating the patients at this hospital, provided details about this to MATICHON. They said that since the beginning of the year, a total of 25 people have come to the hospital for treatment of encephalitis. Six have died.

"We cannot provide as good treatment as we would like. The best method is to find a way to prevent this, such as by eradicating the mosquitos and their breeding grounds. Animals such as pigs, horses, goats and sheep that are bitten by mosquitos should not be kept near people's houses. If a child shows signs of having the disease, he should immediately be taken to the hospital for examination. Because if he receives treatment quickly, his changes of survival are good," said Dr Siriwan.

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TREATMENT FOR 'SUPER GONORRHEA' REPORTED

Bangkok MATICHON in Thai 7 Jul 83 pp 1, 2

[Article: "It Has Been Reported That There Is a Drug That Can Cure Super Gonorrhea"]

[Text] The Anti-Venereal Disease Association has appealed to the people to quickly gain knowledge about venereal disease. Gays have been warned to be careful about "AIDS" spreading in Thailand. It has been revealed that there is a drug that can cure "super gonorrhea."

On 6 July, Dr Somnuk Wibunsen, the president of the Anti-Venereal Disease Association of Thailand, announced that the association is very concerned about the fact that Thai know very little about venereal disease, particularly primary syphilis. At present, the rate of incidence is 50 times higher than it was 20 years ago.

"Concerning primary syphilis, if it is treated properly the person can be cured. Young people who are still sexually active should learn what the symptoms of primary syphilis are and remember them. The symptoms are loss of hair, as if a cockroach had been nibbling all over the head. This can be seen easily in people who have cut their hair short. Any person who has lost a lot of hair should suspect primary syphilis as the cause and quickly see a doctor," said Dr Somnuk. He said that in addition to loss of hair, the hair at the ends of the eyebrows will also fall out. The person will have a red rash all over his body, or "flower" as it is called. The rash will not itchor have pimples. Other general symptoms are loss of appetite, low-grade fever, loss of weight and paleness. Besides this, there may be soreness of the neck, enlargement of the liver, loss of hearing and blurred vision.

Dr Somnuk said that primary syphilis is very prevalent at the present time. Within 5-10 years, tertiary syphilis will destroy the nervous and vascular symptoms. In that stage, it cannot be cured. Symptoms include nervousness, insomnia, severe stomach pains of unknown cause, an inability to suppress the urge to urinate and defecate, a collapsed bridge of the nose, holes in the roof of the mouth, blindness, paralysis, insanity and inflation of the arteries. This is like dying "in installments."

"Most of the people you see walking along the street who do not act normally have syphilis and this has affected their nervous systems," said Dr Somnuk. He also discussed the results of the Third Southeast Asian and Pacific Conference on Venereal Disease held on 24-26 June. He said that based on the reports presented by doctors, it was learned that Thailand has the highest incidence of super gonorrhea; this is followed by the Philippines, Singapore, Hong Kong, Malaysia and Taiwan. And the rate of incidence is rising.

As for drugs to treat super gonorrhea, there is one antibiotic that requires only one injection to cure the disease. This drug is spectinomycin 2 gram. It is injected into the gluteal muscle. It is effective in 99.5 percent of the cases and costs 100 baht. Cefuroxine, cefutoxine third generation of cepharosporin, is injected once into the muscle in conjunction with probenecid. It is effective in 98 percent of the cases and costs over 150 baht. As for drugs taken orally, there are drugs such as rosoxasin 300 mg., thiampenicol and spectinomycine.

Concerning AIDS, which is spreading among gays in the United States, Dr Somnuk said that this disease has not yet been found in Thailand. But it is a very serious disease because it lowers the body's resistance to disease. In the end, when the person contracts some other disease, death may follow.

Dr Nawarat Krairuk said that the symptoms of AIDS are pimples all over the body and fatigue. The mortality rate is approximately 70 percent.

"There is still no proof of any cases of AIDS in Thailand, but there have been two or three cases resembling this in which the patients died. Thai homosexuals should be careful and not have any contact with foreign homosexuals who come here for a visit.

From 1400 to 1600 hours on 9 July, the Anti-Venereal Disease Association will hold a discussion on the topic "Gays and Venereal Disease" at the conference hall of the Public Relations Department. In addition, there will be a display on venereal disease and people may have blood samples taken to check for syphilis.

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## FORTY PERCENT OF POPULATION SUFFERS FROM ANEMIA

Bangkok MATICHON in Thai 2 Aug 83 p 2

[Article: "Twenty Million Thai Suffer From Anemia; Doctors Are Adding Iron to fish Sauce To Solve This Problem"]

[Text] Approximately 20 million Thai suffer iron-deficiency anemia. Doctors are urgently conducting studies on adding iron to fish sauce in order to solve this problem as quickly as possible.

In his capacity as the head of the project to add iron supplements to fish sauce, Dr Pricha Charoenlap, who is with the Faculty of Medicine, Mahidon University, said that at present, U.N. statistics show that, worldwide, approximately 500 million people suffer from a deficiency of iron. In Thailand, the same number of people as in the United States suffer from anemia. That is, about 20 million people, or 40 percent of the population, have anemia.

Dr Pricha said that the main reason for the lack of iron is that the people are eating less meat, which contains iron that the body can assimilate easily. This may be because of the economic situation. Also, meat is difficult to obtain. Thus, they have begun eating more vegetables. Vegetables contain less iron and the iron is not assimilated as easily as that in meat.

Besides this, because infants are not getting much breastmilk, they, too, have an iron deficiency.

Another thing that has led to serious iron deficiency is the problem of intestinal parasites. This is a problem for people in the rural areas. The parasites drink the blood of the people who are ill. Another factor is that people frequently take painkillers such as aspirin or APC, which cause sores to develop in the stomach, which results in loss of blood.

Dr Pricha said that during the past 30-40 years, iron deficiency in the people has not improved and this is an important reason for the increase in the number of people suffering from anemia. This is because iron is an important element in the production of blood corpuscles and in the

functioning of various organs of the body. If there is a shortage of iron, there will be fewer red corpuscles and the person will become anemic. The person will become weak, pale, sluggish and slow-witted. This is one of the reasons for the economic losses. If a person becomes too anemic, he can die.

As for Thailand, studies on adding an iron supplement to fish sauce are being conducted in Sao Hai District in Saraburi Province. Tests have been conducted with 5,000 people for a 2-year period, with blood samples taken every year. The results have been better than expected. The number of red blood corpuscles has increased. These results will be reported to the Ministry of Public Health so that the people's iron-deficiency problem can be solved.

### BRIEFS

GONORRHEA INCIDENCE--Doctors have classified those with venereal disease. Northeasterners have the highest incidence. Dr Wichanarot Phetchabut, the head the Dermatology and Allergy Section at the Taksin Hospital and the owner of the "Wichonnarot Clinic" at Sam Yan, at which he treats skin disorders, said that "super gonorrhea" is just like other types of gonorrhea except for the fact that it can produce antipenicillin enzymes. Or stated simply, super gonorrhea is a drug-resistant strain of gonorrhea. This gonorrhea has become drug resistant because patients have not followed the orders of their doctors and have not taken the medicine prescribed for them. Thus, this strain has become drug resistant. In 1977, this strain accounted for only 5 percent of the gonorrhea cases in Thailand. But in 1980, it accounted for 50-60 percent. And at present, it accounts for approximately 80 percent. Statistics of the Phra Mongkut Hospital show that approximately 49.5 percent of the patients have super gonorrhea. Dr Wichanarot said that doctors have found that the incidence of gonorrhea is highest among low-income groups, [including] laborers, prostitutes and workers. Most are northeasterners and people who live just outside Bangkok. Also, many low-echelon government officials and students who do not live with their parents and who lack supervision, especially those in their teens, have gonorrhea. As for preventing gonorrhea, Dr Wichanarot said that after people have intercourse, they should wash themselves carefully in order to prevent being infected. [Text] [Bangkok MATICHON in Thai 24 Jul p 2] 11943

SEVERE MOSQUITO PROBLEM--Hordes of mosquitos have descended on Don Sak and Kanchanadit districts in Surat Thani Province. The reason for this is that the people are destroying the coastal forests to make shrimp farms and so the mosquitos do not have a place to live. Buffalos have been bitten, and they have died. Mr Peng Phromsuwan, the provincial veterinarian in Don Sak District, Surat Thani Province, said that at present, the people living in the coastal villages of Don Sak and Kanchanadit districts are experiencing problems and are terrified by the fact that they are being invaded by hordes of mosquitos. It has reached the point where they have had to find wood to burn fires at night in order to chase away the mosquitos. "There are hordes of mosquitos; they are deafening. They bite the buffalos, pigs and dogs," said Mr Peng. He said that in Ban Phuang in Phlaiwat Commune, Kanchanadit District, many buffalos have died as a result of this. A reporter questioned Mr Wirot Nuankaeo, the assistant head of Malaria Team 5, Surat Thani, about this and was told that in Don Sak and Kanchanadit districts, booklets have been distributed

to the malaria teams, and officials have been sent to inspect things to see if there are in fact more mosquitos than usual in Kratae, Phlaiwat, Tha Thong and Tha Uthae communes in Kanchanadit District and in Pak Phraek Commune. From the investigation conducted by the malaria officials, it was learned that at Bang Phram Hamlet, Village 5 in Pak Phraek Commune, where about 100 families live, people have contracted malaria and so DDT has been sprayed and medicine has been dispensed to the people. At the beginning of August, a mobile malaria team will be sent to spray DDT in order to eradicate the anopheles mosquitos, which carry malaria. This will be done in every district in Surat Thani Province where this disease might spread and become a problem. Mr Niphon Bunphatro, the governor of Surat Thani Province, said that the province has received reports from these two districts stating that there are more mosquitos than normal because of the destruction of the coastal forest in order to build shrimp farms. At present, the people are very interested in raising shrimp in this area. This has resulted in the mosquitos not having any place to live and so they have descended on the village. However, Mr Niphon said that the mosquitos that have invaded the village are just pests. The malaria officials have informed him that these mosquitos do not carry malaria or any other disease that could pose a danger to the people's health. [Text] [Bangkok MATICHON in Thai 19 Jul 83 p 2] 11943

### PRECAUTIONS AGAINST FOOT-AND-MOUTH DISEASE INTENSIFIED

Surabaya SURABAYA POST in Indonesian 30 Aug 83 pp 2, 12

/Text/ Veterinarian A. Silitonga, chief of the East Java Provincial Animal Husbandry Service, said East Java had been declared free of foot-and-mouth disease under the minister of agriculture's decision of 20 January 1981.

Since many cattle in Central Java Province were stricken with the disease recently, like it or not, greater precautions had to be taken against the disease, particularly in areas bordering Central Java. Inoculations have been given to 115,000 cattle and 57,000 milch cows.

Dr Silitonga said no medication is available for this disease and cattle recover on their own. However the disease spreads rapidly. Cattle die only from secondary foot infections for which antibiotic injections are administered.

Dr Silitonga did not say how many cattle were stricken with the disease in East Java (caused by the spread of the disease from Central Java), but there appear to be very few because of the intensive preventive measures taken. These measures include confining the cattle to their barns at all times and slaughtering diseased cattle immediately and destroying their bones.

Meat from the cattle may be sold after it has been hung for 24 hours.

The entire barn must be cleaned before any healthy cattle are inoculated. The disease spreads rapidly via direct contact, uneaten food, tracks of diseased animals, from the river area in which diseased animals are bathed, or even from the cattle owner himself. The disease is caused by a virus.

Bojonegoro closed the region bordering Blora Regency, which was stricken by the disease, to the traffic of cattle, and the livestock market in Padangan (located east of Cepu) was closed temporarily.

Mass inoculations have been administered to cattle on the Central Java border and in Bojonegoro and Ngawi Regencies. Inoculations will be administered to cattle subsequently in Tuban, Madiun and Magetan Regencies as well as subdistricts along the Bengawan Solo River in Lamongan and Gresik Regencies and in all of East Java. Cattle owners were requested to confine their cattle to barns and not to pasture their cattle in the forests west of Bojonegoro or bathe them in

the Bengawan Solo River. East Java cattle merchants were also requested to keep Central Java cattle out of the province.

Initial symptoms of the disease are blisters in the mouth and on the tongue and sores on the hooves. The animal salivates continually, has no appetite and cannot remain standing for any length of time.

6804

### NEWCASTLE DISEASE STRIKES SANDAKAN

Kuala Lumpur NEW STRAITS TIMES in English 12 Sep 83 p 15

[Text]

SANDAKAN, Sun. — About 20,000 chickens in four poultry farms here were wiped out following an outbreak of the ranikhet disease virus (RDV) here.

virus (RDV) here.
The Sandakan Veterinary Officer, Dr Michael Kehoe, said the affected chickens were from farms located mainly along the 13km Jalan Labuk. It occurred over the past one week.

He said the disease would affect the lungs, brains or bowels of the chickens and there was no treatment for the chickens once they were infected.

# Vaccination

"Owners of farms which have not been affected should take immediate preventive measures to check the spread of the disease," he added.

Dr Kehoe said several factors such as the change in weather could result in chickens which were not vaccinated or incorrectly vaccinated being susceptible to infection.

He also advised poultry owners to vaccinate their chicks when they were one-day old with the 'F' strain vaccination and to

repeat it two weeks later.
They should also be vaccinated when they were five to six weeks old with the 'S' strain which should also be repeated at 16 weeks, he added.

Dr Kehoe said there were alternative vaccination methods and advised farm owners to contact the Veterinary Department or their veterinary surgeons for further information.

Once a few chickens showed symptoms of being infected the rest of the healthy ones should be slaughtered to reduce losses," he said.

He said affected birds

He said affected birds and all rubbish in the farms should be incinerated and the whole farm disinfected.

"Do not allow unnecessary visitors into the farms as they can carry the virus in their shoes and clothings," he said.
Sandakan, which has about 90 poultry farms,

Sandakan, which has about 90 poultry farms, suffered an outbreak of the disease on a larger scale about five years ago.—Bernama

#### BRIEFS

DOG DISTEMPER SPREADS NORTH--Whangarei, Today (PA).--An outbreak of the dog disease distemper in Auckland has spread to Northland, where 15 cases have been reported, according to the Northland secretary for the New Zealand Veterinary Association, Mr Mike Kearns. Seven cases had been reported to vets in Kaitaia and there were six in Kaikohe, one in Waipu and Hikurangi, he said. In Auckland, worried dog owners were continuing to flood Auckland veterinary clinics today. Cases are still being reported throughout South Auckland, with a few scattered about the city. Auckland director of the SPCA Mr Neil Wells said it would be at least a fortnight before it would be possible to gauge accurately attempts to curb the outbreak. SPCA inspectors have reported 20 cases of infected dogs in South Auckland over the past three weeks. [Text] [Wellington THE EVENING POST in English 13 Sep 83 p 30]

# NOVEMBER OUTBREAK OF BOVINE PLEURAL PNEUMONIA FEARED

Lisbon TEMPO in Portuguese 8 Sep 83 p 10

[Article by Horacio Piriquito: "Pleural Pneumonia to Attack again this November"]

[Excerpts] Pleural pneumonia has already led to the slaughter of 2,423 head of cattle in the entire country, according to the most recent information available at the main office of cattle operations, while the struggle against the disease has prompted since the end of February, when the outbreak was detected, the disbursement of an appropriation of approximately 140,000 contos. As recently as last week, the Council of Ministers, which met for an entire day to deal with agricultural matters, approved an additional appropriation of 300,000 contos for the most urgent measures against the disease and also to provide compensation to the owners of the slaughtered cattle.

At the present time, the highest authorities responsible for activating the machinery to fight pleural pneumonia give assurance that they have the disease virtually under control. However, they are keeping an anxious eye on the beginning of next winter, since it is at that time that the agent of the disease can become active with greater intensity due to the abrupt changes in temperature.

Mario Teixeira, manager of Animal Health Services, told our paper: "The enemy army (the disease) will stage a major attack beginning with the last days of October and for this reason we must take up our defensive positions now."

The Disease Came from Spain

According to Carlos Fontes, General Manager of Cattle Operations, "The pleural pneumonia outbreak is definitely thought to have had its origin during the last 2 weeks of August 1982 with a cow that was sold by a dealer in the Moncao area, suspected of engaging in the illegal traffic of smuggling cattle in from Spain."

The contamination occurred as the disease spread to the rest of the cattle of the enterprise and later through the mechanical milking rooms which accommodate the cattle of the area. Carlos Fontes adds: "A few days after the emergence of the Moncao focus of infection, new cases were located in the municipalities

of Barcelos and Famalicao. All the animals regarded as having been exposed and suspected of having the disease were slaughtered immediately, their owners compensated and the enterprises disinfected and closed in observance of the period of "sanitary isolation."

On the basis of the statements made to our paper by Carlos Fontes, the greatest concentration of milk production involves precisely the areas of Entre Douro e Minho, Beira Litoral and Ribatejo e Oeste, where the great majority of the 1,504 milking rooms in existence in the country is concentrated on the seacoast of North Protugal, which embraces the two areas of Entre Douro e Minho and Beira Litoral. Carlos Fontes concluded by saying: "All this, complicated by the fact that animals are constantly changing hands, and an example of this is the fact that one of the cows suffering from pleural pneumonia had had five owners in the last 6 months, according to the animal health investigation, make the implementation of services a difficult matter."

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Entre Douro e Minho	465	1963	959	345	1304	. 69	(12	13	P4-08-83
Tras-os-Montes	36	248	3	23	26			1388	19-08-83
Beira Liforal	631	-	926	77	1003				23-08-83
Beira Interior	- 2	39	-	-	-	2			27-07-83
Roafejo a Ceste	- 8	339	5	77	82	-	7	317	19-07-83
منت ميك ميكان	2	35	1	-	,	-	-	-	24-08-83
Algarve (	8	202	-	7	7		.7	187	12-08-83
TOTAL	1152	2848	1894	529	2423	71	14	1892	

### Key:

- 1. Contagious Plueral Pneumonia in Bovine Cattle
- 2. Regional Directions
- 3. Number of Foci
- 4. Effective of Foci
- 5. Slaughters for Sanitation Purposes
- 6. Number of Animals of the Foci Scheduled for Slaughter
- 7. Enterprises Under Control
- 8. Last Date Reference
- 9. With Lesions
- 10. Without Lesions
- 11. Total
- 12. Number of Enterprises
- 13. Number of Animals

8089

# ANTHRAX EPIDEMIC BREAKS OUT IN NORTHERN LOCALITIES

Hanoi NHAN DAN in Vietnamese 18 Aug 83 p 4

[Article: "Prevention and Control of Anthrax Epidemic Among Cattle and Horses"]

[Text] According to the Veterinary Department (Ministry of Agriculture), an outbreak of cattle anthrax occurred in eight districts in five northern provinces and municipalities. The disease, which often occurred in the old pockets of contagion like Loc Binh (Lang Son), Vi Xuyen and Meo Vac (Ha Tuyen) and Tra Linh (Cao Bang), has killed 119 water buffaloes, cattle and horses and was transmitted to 154 persons.

The outbreak and spread of the epidemic were due to a lack of proper attention paid to preventive inoculation in the pockets of contagion and their vicinities, slow discovery of the epidemic and diagnostic activities which allowed the disease to spread and to be transmitted to people and a lack of urgent and firm control action. The epidemic broke out in two villages in Gia Lam District (Hanoi), which was a noteworthy fact. The new pocket of contagion resulted from the fact that the locality had failed to observe all of the disease control procedures required for sending away and bringing in domestic animals when it bought water buffaloes and horses in Lai Chau.

All provinces and municipalities concerned must strengthen the control of the old pockets of contagion; organize preventive inoculation for the herds of water buffaloes, cattle and horses in the pockets of contagion and their vicinities; seriously carry out the regulations about disease control for sending away and bringing in domestic animals; and properly organize disease prevention and control, thus preventing the disease from spreading any longer.

5598

SUGAR CANE THREATENED BY DEADLY NEW DISEASE, THRIPS

Port-of-Spain TRINIDAD GUARDIAN in English 30 Aug 83 p 4

[Text]

A NEW disease — thrips is causing havoc to thousands of acres of farmers' canes in the country and unless Government makes the final payment for canes supplied this year, next year's crop could be a disastrous one, according to Mr. Boodram Jattan, Second Vice President of Island-wide Cane Farmers Trade Union (ICFTU).

He has called on Government to make the final payment now in order to save the 1984 harvest.

Mr. Jattan said he had already spoken to State-owned Caroni (1975) Limited and the company was giving whatever assistance it could through aerial spraying of canes against the "deadly disease of theirs".

Mr. Jattan said he spoke yester-day morning to Dr. Patrick Alleyne, Parmanent Secretary, Ministry of Agriculture, Lands and Food Production, concerning the final payment.

He said he was told that the

Ministry of Agriculture did everything within its jurisdiction and the matter was now in the hands of Cabinet.

The farmers have already received

The farmers have already received a \$60 per ton as first interim and the ICFTU submitted a proposal calling for a final payment of \$105.88.

Mr. Jattan is a member on the Caroni Board of Directors, representing his union. He said that the Board met recently and discussed ways and means of boosting farmers' production. "But how can we boost production when we have no money? he asked.

Mr. Jattan said that the 1983 crop was the lowest production by farm-

was the lowest production by farmers — 346,000 tons. With the destruction of canes by frog hoppers, smut and now thrips, everything pointed to a "very poor 1984 crop for farmers, if there is going to be a crop at all" he said.

INSECT DAMAGE TO MEKONG DELTA CROPS REPORTED

Hanoi NHAN DAN in Vietnamese 12 Aug 83 p 2

Article: "Vegetation Protection in the Mekong Delta"

Excerpt With nearly 2.5 million hectares planted with rice crops every year, the nine provinces of the Mekong delta constitute the largest rice area in our country. Natural conditions in this region are generally very favorable to the growth of rice plants. Frosts, hot winds, storms and floods are very rare. However, it is precisely because of these natural conditions and because of the present farming system (with rice being mostly the only cultivated crop, with protracted sowing and transplanting periods, with an abundant application of nitrate fertilizer and with the dense and direct sowing method) that harmful insects and diseases have developed frequently and vigorously and have reduced both the productivity and volume of production of rice throughout the region. Other types of crops have also been damaged frequently and seriously by many kinds of harmful insects.

In 1977, 1978 and 1979, brown planthoppers withered rice plants on tens of thousands of hectares, causing the loss of millions of tons of paddy; at present, they are still a subject of constant obsession for peasants in this region. Ever since 1980 when brown planthoppers were basically eliminated, other kinds of harmful insects have appeared. During the 1981 10th-month agricultural season, more than 100,000 hectares were damaged by the insects called "beenhj tieem dqotj saanf" which were generated by nematodes. During the 1981-82 winter-spring season, rice blast appeared on more than 50,000 hectares, affecting 30 to 50 percent of the plant leaves on nearly 10,000 hectares and proving most serious in the two provinces of Tien Giang and An Giang. During the 1982 summer-fall season, paddy thrips developed on 200,000 hectares--nearly 50 percent of the direct-sowing area for the whole crop-with an average density of several thousand insects on each square meter. During the 1982 10th-month season, stem borers became a local pestilence in Long An. During the 1982-83 winter-spring season, rice armyworms, stem borers and leaf rollers emerged on hundreds of thousands of hectares in almost all provinces with a much greater density than in all the previous years. In spring 1983, bud worms saau xanh damaged the green bean and soy bean crops in An Giang to such an extent that practically no harvest could be gathered in from thousands of hectares.

Because of the profuse development of harmful insects and diseases, ever since the liberation day and especially over the past few years following the damage done by brown planthoppers, the task of protecting the vegetation has been given special attention by the administration at all levels and by the people in the region and, as a result, has made great, noteworthy progress.

9332

LEAFHOPPERS, PLANTHOPPERS, ARMYWORMS DESTROY RICE IN SOUTH

BK020923 Hanoi Domestic Service in Vietnamese 2300 GMT 29 Sep 83

[Text] According to a report by the Plant Protection Department, to date more than 140,000 hectares of late summer-fall and early 10th-month rice in southern provinces, especially the Mekong River delta provinces, have been destroyed by brown leafhoppers, rice planthoppers, and rice armyworms.

In Minh Hai, rice planthoppers have ravaged 90,000 hectares of rice. In Cuu Long, brown leafhoppers and rice planthoppers have demolished 36,000 hectares of rice. Meanwhile, in Tien Giang, Ben Tre, Long An, and Hau Giang, leafhoppers have appeared on patches of 10th-month rice and rice seedlings. The provinces concerned are concentrating on guiding localities and applying many uniform measures to contain and exterminate leafhoppers, preventing them from spreading. Since mid-September, the party and people's committees of Minh Hai have mobilized provincial cadres and district plant protection stations to help basic units launch leafhopper extermination campaigns. The province has used 60 mechanical sprayers, borrowed another 30 sprayers from the southern plant protection department, and sent more than 140 metric tons of insecticides to basic units to help save rice.

Aside from chemical sprays, peasants have also applied many folk methods such as using lanterns as traps and gas oil to exterminate leafhoppers. Thanks to its early detection of harmful insects, Cuu Long has sent cadres and insecticide to aid the seriously affected areas, saving most of the rice acreage attacked by leafhoppers. At present, local peasants are continuing their rice-saving efforts, ready to cope with any sudden appearance of harmful insects and diseases. Tien Giang, Hau Giang, and Long An have mobilized peasants to work with plant protection teams to successfully combat leafhoppers. The peasants in these provinces have used a combination of chemicals, vegetable insecticides, and lantern traps to exterminate harmful insects to save their rice crops.

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END